Frontend Documentation (React)

Responsibility:

The frontend is responsible for:

- User authentication

- Session handling

- Role-based UI rendering

- Form validation

- Communication with the backend

Frontend Architecture:

pages → api → context → types

Structure

- pages/ → Screens (Login, Dashboard, CreateLeave)

- api/ → Axios and HTTP calls

- context/ → Authentication Context

- types/ → Shared TypeScript models

Frontend Authentication:

Login Flow

1. User enters email

2. Frontend calls /auth/login

3. User data is stored in AuthContext

4. Axios automatically attaches X-User-Id header

api.defaults.headers.common["X-User-Id"] = user.id;

Role Management (Frontend)

Role	Behavior
Employee	Create requests, view own requests
Manager	View all requests, approve/reject

The UI adapts dynamically:

- Action buttons visible only to Managers
- Creation forms visible only to Employees

Note: The backend always validates permissions (defense in depth).

UI / Styling

- Tailwind CSS
- Responsive design
- Visual feedback for errors and states
- Simple and reusable components

Frontend Testing

Tools

- Vitest
- React Testing Library

Included Tests

- Successful login
- Form validation
- Role-based UI behavior (Manager vs Employee)

Seed users (preloaded):

Role	Email	ID
Employee	juan01@gmail.com	1
Manager	rodri02@gmail.com	2
Employee	beydi03@gmail.com	3